W5YI

National Volunteer Examiner Coordinator

REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

Fred Maia, W5YI, Editor, P.O. Box 565101, Dallas, TX 75356-5101

* In This Issue *

Hams Cited for Packet Violations
Operating under Automatic Control
Telegraphy Exam Exemption Policy
FCC Issues New Procedure Format
December VE Program Statistics
December Ham Licensing Figures
Miscellaneous Part 97 Amendments
20 Meter HF Problems: Comments
On Phone Patches/Net Responses
ARRL Gets Non-Ham Satellite Ticket
Apple Computer Petitions for New
Data-Personal Comm. Service
...and much, much more!

Vol. 13, Issue #4

\$1.50

PUBLISHED TWICE A MONTH

February 15, 1991

FCC CITES ELEVEN HAMS FOR PACKET VIOLATIONS

Does this signal the end of packet radio?

In an event that even captured the interest of the New York Times, the FCC's Norfolk, Va. office cited 11 amateur packet operators for violation of the Part 97 restrictions against business communications. They are alleged to have transmitted a message from an anti-war organization.

Three of the 11 received \$300.00 Notices of Forfeiture (fines). The others received letters that are equivalent to Notices of Violation, according to Norfolk Engineer In Charge (EIC) J. Jerry Freeman. He investigated a legitimate complaint, Freeman told us, and found that the complaint was correct.

The engineer also said he is not out on a hunt for violative packet operations, but added that with the new no-code Technician license, many new people will be getting into ham radio -- another reason why amateurs will have to "...clean up their act."

The complaint was registered by U.S. Navy officer, *Russell P. "TJ" Tjepkema/NZ2D* of Virginia Beach, VA, who felt the message in question was a prohibited amateur communication since a "...profit making 900 number" was involved. In a packet message to N3LA, "TJ" said he believed "This message violates the spirit of amateur radio in that

it has always been considered inappropriate to use amateur radio to further political causes. As a naval officer and a citizen, I strongly disagree with WA3QNS political views. However, I would fight to protect his right to state them, First Amendment. Since free speech does not apply to ham radio, however (i.e. money making is prohibited), I will fight against this type of bulletin. I intend to visit the local FCC office with a copy of this bulletin with the intent of getting their opinion. If they agree, I plan to file a formal complaint. ..." The FCC agreed and the "tickets" were subsequently dispatched.

Citations issued

According to AMSAT President Emeritus *Tom Clark, W3/WI*, the citations "...may well spell the end to much of amateur packet radio." Clark was one of those cited by the FCC. He described the FCC's "demand" for a response within 10 days as "...chilling".

This appears to be the first time that the Commission has enforced the rules against operators of packet stations who retransmitted an allegedly violative bulletin that originated at another station. A debate has raged for years over whether operators of intermediate stations in a packet network

THE W5YI REPORT is published on the first and fifteenth of the month - P.O. Box #565101; Dallas, Texas 75356-5101 - Tel. (817/461-6443) SUBSCRIPTION RATE: (U.S., Canada and Mexico.) One Year (24 issues) \$24.50 - Two Years: \$45.00 - Three Years: \$64.00. Foreign Subscriptions via Air Mail: \$39.50 per year. (Payment may be made via Check, Money Order, VISA or MasterCard in U.S. funds.)

Page #2

W5YI REPORT National Volunteer Examiner Coordinator

should be held responsible for compliance of messages they transmit. The FCC, however, has steadfastly maintained that each amateur operator is responsible for complying with Part 97.

The letter sent by Freeman to the several amateurs, dated Jan. 25, 1991 said, "I have received a report that indicates you may have operated your amateur radio station in violation of Section §97.113(a) of the Commission's Rules. It appears that you used the Amateur Radio Service to facilitate the business activity of THE COALITION TO STOP U.S. INTERVENTION IN THE MIDDLE EAST."

"Specifically, on or about January 5, 1991 you received a packet radio message originated by amateur radio station WA3QNS. You then transmitted this packet radio message to another amateur radio station. ... This activity was a facilitation of the business affairs of the Coalition to Stop U.S. Intervention in the Middle East and therefore in violation of Section §97.113(a)."

The message was forwarded from the so-called "Free Speech" BBS operated by Rolf Jespersen, N3LA, in Spring City, Pennsylvania. It allegedly originated from WA3QNS addressed to ALL @ALLBBS. N3LA and WA3QNS were among those who received \$300 forfeiture notices. Stations also said to have been cited include N4HOG, WB0TAX, WA4ONG, WA3ZNW, KA3CNT and WA3TSW among others whose calls appeared in the message header "audit trail".

The message asked readers to call a 900 number, or business office or fax numbers, to voice their opinion about the Persian Gulf crisis. 900 numbers, of course, generate revenue for the provider of the number.

The packet message did not mention the \$10.00 fee assessed by the phone company against callers of the 900 number. The charge was verified by packet BBS owner KJ4LQ, Ed Lowe, who was on vacation in Florida at the time. He was only able to wipe out the 900 message 5 or 6 days later.

FCC rules prohibit use of Amateur Radio to facilitate the regular business affairs of any party, whether for-profit or not-for-profit. Free Speech BBS operator Rolf Jespersen, N3LA of Spring City, PA, told us Joseph L. Reed, WA3QNS " ... is a known political activist ...who has been stretching this point to the limit - and finally past the limit." WA3QNS has now been permanently "locked out" of the N3LA BBS.

We tried to reach Reed, but he has an unlisted number. Jespersen told us he had Reed's telephone number, but did not feel comfortable releasing it to others. We understand WA3QNS is denying that he initiated the message. "Everything indicates that he did originate the message...", Jespersen added.

N3LA said he closely monitors all messages on his system but this one got by him since " ...it was posted after ten o'clock on a Saturday night when I was out. We killed it the following morning ...during routine maintenance. It is difficult sometimes to make a judgement on each and every message going through your board. We killed one this morning (Feb. 10) that requested an SASE for information on a QRP (low power amateur operation) book. The message might be commercial if there a charge for the book."

Text of the message...

Date: 05 Jan 91 22:22:02 EST (Sat) From: wa3qns@n3la.pa.usa.na (JOE)

Message-ID: <21035-N3LA>

To: all@allbbs

Subject: Call This Number, ASAP

VOTING BY PHONE - PHONE 1-900-44-NO WAR!

Conf: mideast gulf

Coalition to Stop U.S. Intervention in the Middle

East - (October 20 Coalition)

36 East 12th Street, 6th Floor, NY, NY 10003 Phone (212) 254-2295 Fax (212) 979-1583 December 7, 1990 - The coalition has a national "900" phone number to tell Bush "NO WAR". The number is 1-900-44-NO WAR (starting Dec. 16). Please use it. A record of each call, by area code and region, will be taken with the petitions to Washington. You may contact the coalition for stickers and flyers to publicize this number, plus copies of the petition for a million signatures against the war, and other organizing literature. (End of packet message)

National Volunteer Examiner Coordinator

February 15, 1991

Page #3

BBS operations to change?

Sysops and users of packet BBSs appear to be furious or confused about what to do about the FCC citation. Some are placing messages asking how to contact the FCC. Others are stating that they will screen messages going through their systems. Typical were these statements seen on packet systems around the country:

"Hello guys... I received a certified letter today from the Norfolk FCC Engineer in Charge informing me I have violated Section 97.113(a), and must forfeit \$300.00 fine or show cause why this fine should not be levied. It has to do with the forwarding of the WA3QNS 900 number message which appeared Jan 6 or thereabouts. (I killed it as soon as I read it, but it surely forwarded before I did).

"Take note... I must now HOLD ALL TRAFFIC through this board until I have reviewed it, for my own safety, and I suggest you do the same!!! If anyone else has been cited (the header trail is N4HOG,WB0TAX,WA4ONG,W3IWI....) let me know. I will try to persuade the FCC this was NOT a willful act, but I suspect it will be an uphill battle."

"This is a VERY BAD SIGN! If this is upheld, my BBS may have to shut down, as I cannot review every message, or even every bulletin, that passes through it. I suspect all 'hub' operators will be in the same boat. I always understood that the originator of a message had the full responsibility for the content. If I am to be held fully responsible for the contents of every message on my BBS, I'll simply shut it off. Watch this closely, it could spell the end of BBS operations as we currently know them."

"I want to make public at this time that this BBS, which handles bulletins for @USA...now screens all bulletins addressed as @USA, @ALLUS, @ALLUSA, and @ALLBBS.

"This is now being done to help prevent this station from receiving a citation from the FCC. It is not to upset anyone, but don't you think a sysop [stystem operator] has a right to protect his license in order to continue to operate? Also

myself, as well as most all other sysops have a good bit of money invested in order to provide links throughout the world via packet networks, for many users."

Message condom

The most extensive response to the enforcement action was aired by W3IWI, who operates one of the major packet message forwarding centers in the Washington D.C. area. He recommended a "...message condom" technique to screen out undesired messages. Here are excerpts:

"The implications of the action by the FCC's Norfolk Field Office are absolutely appalling. What is implied is that each and every station in a storeand-forward network is responsible for the actual message CONTENT passing through each node. The BBSs were cited because their calls were in the message header "audit trail". The FCC's action states that each BBS SYSOP is personally responsible for the 'correctness' of all messages merely passing through his system. Here, the W3IWI mail switch handles about 10,000 messages per month automatically. There is NO WAY that I can vouch for every bit that passes through!

"In future networks...it is quite possible that a given message will be fragmented and parts of it sent via several parallel paths. The message may exist as a complete entity only at the ends of a virtual path. It would be impossible to implement the censorship the FCC seems to be demanding with such a network, so the "legality" will interfere with development of new technology.

"Consider another recent development: amateur packet radio satellites. PACSAT is licensed by the FCC with a US trustee and a cadre of US sysops. PACSAT is, in essence, a flying BBS with the sysops on the ground.

"In order to screen out "offensive" messages, a ground-based sysop has to use a radio channel to verify message CONTENT. But the FCC letter says that the very act of reading an "offensive" message on the radio is illegal. If the Norfolk FCC action is allowed to stand, the logical implication is that PACSATs must be turned off!

Raun Exe

W5YI REPORT

February 15, 1991

Page #4

"A number of us have discussed such issues with responsible individuals at the FCC in Washington ever since the first fledgling days of packet radio. The signal that the FCC sent was that the sole responsibility for the CONTENT of a message lays with the ORIGINATOR. The actions of the Norfolk Office seem to indicate a new policy has been adopted which effectively kills packet radio.

"Personally, I have been silent (but very frustrated) about the 10% of bulletins addressed @USA (or @ALLUS, @ALLBBS, etc.) that are in poor taste. have grown tired of blather about censorship. First Amendment Rights and the incredible volumes of hate mail... I have longed for the return to normalcy with messages on technical topics and personal communications. I have found it frustrating to pay the electric power bill and pay for the W3IWI hardware for others to engage in marginally offensive 'Free Speech'. I have wished that the (ab)users of @USA would have exercised more discretion with self-censorship.

"But I have gritted what teeth I have left and avoided being a censor. Now, the FCC's CEN-SURE has left me with no alternative than to be a CENSOR.

"Until the FCC tells me that I can do otherwise, I will only release @USA messages that I personally screen and am willing to stake my license on. The priority on my time is such that I don't expect to have time to screen @USA bulletins. ...

"For other SYSOPs: my way to do this is to have my SWAP file change all @USA etcetera to a dummy address like @HOLD -- thereby preserving any BIDs so I don't get deluged with multiple copies of the same message. Until we get a clarification I would recommend that you also use a similar message condom and practice "... Safe BBS".

Comment

It looks like the citations will help sysops to exercise greater restraint in airing or forwarding bulletins addressed to ALL at USA or versions of this address. Such bulletins have long congested packet channels with swap-and-shop content or

inane tirades that propagate nationwide over the entire network within a few hours.

It's hard to imagine the FCC sending a signal that only message originators are responsible for complying with Part 97. The ARRL has been seeking just such a provision, but has been rebuffed by the FCC. In PR Docket 90-561, the Commission noted that "The concept of control of an amateur station and responsibility for the station's transmissions...is based on Section §310(d) of the Communications Act. Control is not severable into technical control, content control of messages the licensee originates, and content control of messages originated by other users. ...

"All rules apply individually to each amateur station in the system, not to the resulting system. Each station licensee and each station control operator is responsible for the messages transmitted as well as those retransmitted by the station. Therefore no change in the rule is proposed."

TELEGRAPHY TEST EXEMPTION PROCEDURE

The FCC has issued new administrative procedures concerning "Making the Amateur Service More Accessible to Persons with Handicaps."

Marcus D. Stevens, Chief, Special Services Branch, Gettysburg, PA, sent a new Physician's Certification of Disability format to all VECs on January 29th. The new certification/release form is to be used on/after Feb. 14th on all requests by severely disabled persons for an exemption of the amateur service 13/20 WPM telegraphy requirements. "We will accept the previous format of the physician's certification until March 31, 1991. After that date any application with an 'old' physician's certification will be returned." All certifications must contain original signatures; photocopied signatures are not accepted.

The FCC's Personal Radio Bureau, Washington, DC, simultaneously issued FACT SHEET No. 205 which gives information to physicians concerning Morse code testing and the 13 and 20 WPM telegraphy exemptions. [We had these typeset for our W5YI-VEC operation and they are reproduced on the next two pages for your information.]

National Volunteer Examiner Coordinator

Page #5

February 15, 1991

PHYSICIAN'S CERTIFICATION OF DISABILITY

Amateur Service - 13/20 WPM Telegraphy Exemption

Physician's Name:
Physician's Address:
Office Telephone Number: ()
I certify that is severely handicapped. (Applicant's Name)
Because of this severe handicap, this individual is unable to pass a 13 (or 20) words per minute telegraphy examination for an amateur operator license.
I am licensed to practice in a place where the amateur service is regulated by the Federal Communications Commission as a doctor of medicine (M.D.) or a doctor of osteopathy (D.O.)
WILLFUL FALSE STATEMENTS ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE TITLE 18, SECTION 1001
(M.D. or D.O.)
Physician's Name (typed or printed) Date:
PATIENT'S RELEASE
Authorization is hereby given to the physician named above, who participated in my care, to release to the Federal Communications Commission any medical information deemed necessary to process my
application for an amateur radio license.
application for an amateur radio license.
application for an amateur radio license.

Federal Communications Commission - Private Radio Bureau

FACT SHEET No. 205 - February 1991

INFORMATION FOR PHYSICIANS WHO CERTIFY THAT AN INDIVIDUAL IS UNABLE TO PASS A TELEGRAPHY EXAMINATION FOR AN AMATEUR RADIO OPERATOR LICENSE.

Applicants for certain amateur radio operator licenses can be granted credit for the Morse code portions of the examinations, if such applicants have severe handicaps that prevent them from passing the required test. The procedure to request credit is by submission of a physician's certificate indicating that the applicant has such a severe handicap.

The physician's certification is used by an examinee to receive telegraphy examination credit toward a General, Advanced, or Amateur Extra Class amateur operator license. These are the higher grades of a five-tier license structure. Each level carries additional operating privileges as an incentive for amateur operators to improve their communication and technical skills. To receive the examination credit, the individual must already have qualified for a Novice Class operator license by proving to volunteer examiners (VEs) in the community that he/she knows the required 43 Morse code characters at a speed of at least 5 words per minute (wpm).

Some six to seven thousand persons pass the 13 and 20 wpm telegraphy examinations annually. The examination consists of a five minute message comprised of a series of dots and dashes sent in an audible tone. The tone may be adjusted in frequency and volume to accommodate the examinee. The examinee must answer correctly questions about the content of the message.

Upon request, the VEs who administer the examinations employ special accommodative procedures. They administer the examination at a place convenient and comfortable to the examinee, even bedside. For a deaf person, the dots and dashes are sent to a vibrating surface or a flashing light. The VEs may read the questions to blind persons. The VEs also write for the examinee where the examinee is unable to do so. Where warranted, the VEs pause in sending the message after each sentence, each phrase, each word, or each character to allow the examinee additional time to absorb and interpret what was sent. Also, the VEs substitute a sending test for a receiving test where the examinee's particular handicap precludes a receiving test.

The physician should execute a certification only when the nature of the individual's handicap is so severe as to prevent the passing of a 13 or 20 wpm telegraphy examination, even where the above special accommodative procedures are used. The certifying physician (either an M.D. or D.O.) must be licensed to practice in the United States or its territories. The individual must sign a release permitting disclosure to the FCC of the medical information pertaining to the person's handicap.

No handicapped person is required to apply for exemption from the higher speed telegraphy examination, nor is anyone denied the opportunity to take the examination. There is also available to all persons, handicapped or not, the Technician Class operator license that does not require passing a telegraphy examination.

For additional information contact:

W5YI-VEC P.O. Box 565101 Dallas, Texas 75356 Tel. (817) 461-6443

National Volunteer Examiner Coordinator

DECEMBED VE DOCCDAM STATISTICS

Page #7

February 15, 1991

DECEMBER VE	PROGRA	AM STATIS	TICS
<u>December</u>	1988	1989	1990
No. VEC's	18	18	18
Testing Sessions	465	512	640
<u>VEC</u> <u>1988</u>	1989	1990	
ARRL 35.5%	50.0%	47.3%	
W5YI 39.1	27.2	34.4	
CAVEC 5.1	4.8	4.5	
DeVRY 4.2	4.1	3.1	
Others (14) 15.3	13.9	10.7	
Year-to-Date Sessions	4903	5486	6250
Elements Administ.	8350	7675	9330
<u>VEC</u> 1988	1989	1990	
ARRL 46.8%	59.9%	52.3%	
W5YI 31.5	19.0	28.7	
CAVEC 4.9	5.8	4.8	
DeVRY 6.7	5.1	3.1	
Others (14) 13.2	16.2	12.2	
Year-to-Date Elements	89788	96092	105763
Applicants Tested	4831	4683	5765
<u>VEC</u> <u>1988</u>	1989	1990	
ARRL 47.1%	54.8%	50.9%	
W5YI 31.1	22.6	29.6	
CAVEC 4.3	5.0	4.4	
DeVry 5.0	2.8	3.0	
Others (14) 11.2	13.8	12.1	
Year-to-Date Tested	53546	57417	64737
<u>December</u>	1988	1989	1990
Pass Rate - All	60.5%	58.6%	60.0%
Upgrade Rate - W5YI	58.2	56.7	57.6
Applicants/Session	9.1	10.1	9.0
Appl./Session W5YI	8.3	8.4	8.1
Elements/Applicant	1.7	1.6	1.6
Sessions Per VEC	29.4	25.8	35.6
Administrative Errors by			55.0
December	1988	1989	1990
Defect. Applications	0.8%	0.6%	1.0%
Late Filed Sessions	1.3%	0.2%	0.2%
Defective Reports	1.3%	1.5%	0.0%

VE/VEC	Program	Growth -	1985 to	1991
	The second second	The second secon		

Year	<u>VECs</u>	Sess.	Applic.	Elem.	Pass /	Appl/Sess
1985	18	3223	41439	62589	58.17%	12.92
1986	18	3784	42422	61921	59.65%	11.21
1987	18	4378	49728	81042	60.58%	11.36
1988	18	4903	53546	89788	60.99%	10.92
1989	18	5486	57417	96092	61.49%	10.47
1990	18	6250	64737	105763	60.78%	10.36

[Source: Personal Radio Branch/FCC; Washington, D.C.]

DECEMBER AMATEUR LICENSING STATISTICS

December	1987	1988	1989	1990
New		-		
Amateurs:	2582	2144	2170	3308
Upgrading:				
Novices	1208	711	1168	1326
Technicians	421	248	493	622
Generals	394	201	338	398
Advanced	271	117	230	285
Total:	2294	1277	2229	2631
Renewals: (*)				
Total Renew:	3469	1874	* 107	* 49
Novices	216	165	* 13	* 8
Purged:				
Total Dropped:	1020	1645	1048	1431
Novices	452	467	381	639
Census:				
Indiv. Oper. 4	33389	440311	470792	500243
Change/Year -	13627	+ 6922	+30481*	+29451*
Individual Ope	rators by	Class.	and % or	f total)
	Tare of	Cidoo.	aria to or	willing
Extra Advan.		Technic.		Total:
	General			
Extra Advan.	General			
Extra Advan. December 1987	General	Technic.	Novice	Total:
Extra Advan. December 1987 43902 98610	General 114398 26.5%	<u>Technic.</u> 93466	Novice 83013	<u>Total:</u> 433389
Extra Advan. December 1987 43902 98610 10.1% 22.8%	General 114398 26.5%	<u>Technic.</u> 93466	Novice 83013	<u>Total:</u> 433389
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988	114398 26.5%	93466 21.5%	83013 19.1%	<u>Total:</u> 433389 100.0%
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681	114398 26.5% 113082 25.7%	93466 21.5% 101495	83013 19.1% 80168	<u>Total:</u> 433389 100.0% 440311
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4%	114398 26.5% 113082 25.7%	93466 21.5% 101495 23.1%	83013 19.1% 80168	<u>Total:</u> 433389 100.0% 440311
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989	114398 26.5% 113082 25.7%	93466 21.5% 101495 23.1%	83013 19.1% 80168 18.2%	<u>Total:</u> 433389 100.0% 440311 100.0%
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141	114398 26.5% 113082 25.7% (*) 117153 24.9%	93466 21.5% 101495 23.1% 115427	83013 19.1% 80168 18.2% 85747	Total: 433389 100.0% 440311 100.0% 470792
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7%	114398 26.5% 113082 25.7% (*) 117153 24.9%	93466 21.5% 101495 23.1% 115427	83013 19.1% 80168 18.2% 85747	Total: 433389 100.0% 440311 100.0% 470792
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7% December 1990	114398 26.5% 113082 25.7% (*) 117153 24.9%	93466 21.5% 101495 23.1% 115427 24.5%	83013 19.1% 80168 18.2% 85747 18.2%	Total: 433389 100.0% 440311 100.0% 470792 100.0%
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7% December 1990 53836 105309	114398 26.5% 113082 25.7% (*) 117153 24.9% (*) 119796	7echnic. 93466 21.5% 101495 23.1% 115427 24.5% 127427	83013 19.1% 80168 18.2% 85747 18.2%	Total: 433389 100.0% 440311 100.0% 470792 100.0% 500243
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7% December 1990 53836 105309 10.8% 21.0% Club/	114398 26.5% 113082 25.7% (*) 117153 24.9% (*) 119796	7echnic. 93466 21.5% 101495 23.1% 115427 24.5% 127427	83013 19.1% 80168 18.2% 85747 18.2%	Total: 433389 100.0% 440311 100.0% 470792 100.0% 500243
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7% December 1990 53836 105309 10.8% 21.0% Club/	114398 26.5% 113082 25.7% (*) 117153 24.9% (*) 119796 23.9%	7echnic. 93466 21.5% 101495 23.1% 115427 24.5% 127427 25.5%	83013 19.1% 80168 18.2% 85747 18.2% 93875 18.8%	Total: 433389 100.0% 440311 100.0% 470792 100.0% 500243 100.0%
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7% December 1990 53836 105309 10.8% 21.0% Club/ RACES & Military:	114398 26.5% 113082 25.7% (*) 117153 24.9% (*) 119796 23.9% (1987) 2408	7echnic. 93466 21.5% 101495 23.1% 115427 24.5% 127427 25.5% (1988)	83013 19.1% 80168 18.2% 85747 18.2% 93875 18.8% (1989)	Total: 433389 100.0% 440311 100.0% 470792 100.0% 500243 100.0% (1990)
Extra Advan. December 1987 43902 98610 10.1% 22.8% December 1988 46885 98681 10.6% 22.4% December 1989 50324 102141 10.7% 21.7% December 1990 53836 105309 10.8% 21.0% Club/ RACES & Military: Total Active: 43	114398 26.5% 113082 25.7% (*) 117153 24.9% (*) 119796 23.9% (1987) 2408	7echnic. 93466 21.5% 101495 23.1% 115427 24.5% 127427 25.5% (1988) 2263	83013 19.1% 80168 18.2% 85747 18.2% 93875 18.8% (1989) 2459	Total: 433389 100.0% 440311 100.0% 470792 100.0% 500243 100.0% (1990) 2434

(*) NOTE: The number of amateurs in 1989 and 1990 is not comparable with prior years. Due to the implementation of the 10-year term license in 1984, amateurs who would ordinarily be dropping out of the Amateur Service between 1989 and 1993 by not renewing will be carried on the amateur roles for another five years before being purged from the FCC's data base. This has the effect of overstating the amateur census for 1989 and 1990 since the records of silent keys and non-renewals will not be deleted. For the first time, however, the number of active amateur records exceeds half a million!

[Source: FCC Licensing Facility, Gettysburg, PA]

National Volunteer Examiner Coordinator

February 15, 1991

Page #8

MISCELLANEOUS PART 97 AMENDMENTS

In response to several petitions for rule making, the FCC proposed on Nov. 16, 1990 several changes in the Part 97 rules governing the Amateur Services.

In comments filed Jan. 31, the ARRL contends that its suggested definitions of certain satellite terms should be adopted since they were taken from other FCC Rules "...and in fact are the ITU definitions." The League also feels the amateur radio meaning of "spurious emission" should conform to the definition used by the Commission in other services. They also objected to the use of the word "channel" when referring to radio frequencies.

The ARRL strongly felt that the application of ordinary control operator regulations to stations operating under automatic (repeater/packet) control had potential injustices. They pointed out that remedies to rule violations generally must be applied after the offense takes place and this does not absolve the amateur from the fact that his station made an illegal transmission.

ARRL believes it unfair to hold amateurs responsible when they lack the ability to prevent certain violations in advance. The League says "A general rule is fine, but where the technical characteristics of the particular operating technique demand variation therefrom, the regulatory scheme should be flexible enough to accommodate rather than ignore, the problem."

The ARRL also agreed with the FCC's proposal to reduce scheduled bulletin/CW practice from all ten MF and HF bands to six as a prerequisite to permitting the amateur operator to be paid. They wanted the Part 97 rule to require *simultaneous* six band operation to limit the stations which may compensate operators

David C. Bland, KBØGR objected to a petitioner who wanted a "beginning identification" so a determination could be made whether that station should be allowed access to his repeater. Bland said he opposed any changes in the current streamlined amateur ID procedure and that well-proven methods were available to prevent unwanted access.

The Radio Amateur Satellite Corp. also questioned the definition of "space telemetry." They want it changed to "A one-way transmission from a space station of measurements made in a spacecraft, messages intended to facilitate communications or related to the functioning of the spacecraft." AMSAT also wanted the FCC to clarify rules relating to the retransmission from space of radio messages originating from earth.

AMSAT contends that it is stored messages and not the originating radio signals that are actually retransmitted. They ask the FCC to agree that the forwarding of digital packet messages is the functional equivalent of the retransmission of radio signals and as such may be carried on under automatic control. (Comments filed by AMSAT president Douglas Loughmiller, KO5I)

HF PROBLEMS:

Phone Patches Banned? Net Responses Study

Rumors that the FCC banned phone patches from the ham airwaves on February 1 or February 15 are circulating widely via packet and HF nets, and are generating numerous calls to the FCC. Like the Desert Storm special amateur procedures, which were January's "Rumor of the Month," the phone patch rumor is entirely false, according to Personal Radio Branch personnel.

The Commission has no official proposals to ban phone patching on the table at this time. If it did, it would still have to follow the Administrative Procedures Act, which requires publication of the proposed changes, followed by comments from the public and a Report and Order (R&O) adopting the changes, or a Memorandum Opinion and Order (MO&O) declining to take any action. This is followed by a period during which Petitions for Reconsideration may be filed. None of these events has taken place in the case of phone patching.

The troubles with phone patch abuse were mentioned by Special Services Division Chief Robert McNamara in letters last year to net managers. McNamara's letters also expressed serious concern about alleged bulletin and code-practice rule abuses and the unlawful use of Amateur Radio to promote the regular business affairs of any for-profit or non-profit groups or persons.

He suggested that new rules -- <u>possibly</u> including banning patches or confining them to special frequencies -- might be required to solve HF problems if the amateur community could not voluntarily solve them. Such rule changes, however, were only mentioned for discussion purposes and do not have the status of an official FCC Notice of Proposed Rulemaking.

McNamara asked net managers and other interested parties to respond to the FCC with practical suggestions on how to improve conditions on 20 meters. Several or our previous issues reported the responses, which for the most part denied there were problems

Page #9

serious enough to require radical rule changes.

Glenn Baxter/K1MAN of the International Amateur Radio Network (IARN), requested and received an extension of time to February 1st in which to provide a plan for resolving the HF situation. Baxter -- who himself is in receipt of Notices of Forfeiture in the amount of \$3,400 -- replied to the FCC on January 29th:

"I am now of the opinion that the problem has resolved itself, and that a joint plan is not needed or even possible. Just as asking the 50 states to submit a 'joint plan' for self-government is not practical, neither is it practical to ask the nets to cooperate in an artificial way. The flurry of Notices of Violation and Apparent Liability did the trick and now it is time for a cease fire. It would be wise to quietly call off your dogs now and let me and others do our thing. We are a nation at war now, and I would like the pissing contest with the FCC to stop. Enough already! [Signed: Glenn A. Baxter.]"

Bob Greenberg, W8ZTS, also submitted a letter to the FCC on Jan. 29th. agreeing "...the controversy and the interference at the Net frequency has been alleviated. No longer is the original anti-net/anti-phone patch group or any other group willing to risk FCC citations for direct interference and harassment. It is obvious to a frequent observer that the original complaints about the Nets (then at 14.313 MHz) were without substance and were contrived." Greenberg added "...the fussing on other 20 meter frequencies near the Nets" have no relationship to the Nets. He believes any attempt to impose a solution to this "non-problem" will merely create more problems.

ARRL RECEIVES NON-AMATEUR SATELLITE LICENSE

The FCC has granted the ARRL an experimental license for satellite operations on 149.195 MHz. But the government clearly objects to treating this operation like a ham station!

NASA, other federal agencies, and private entities have participated in experiments to demonstrate search and rescue, disaster communications, and other uses of satellite service in emergency response. The experiments use NASA's *Applications Technology Satellite* (ATS-3). Experimenters have learned that there is a crucial need to establish a procedure for accessing the satellite for emergency communications.

ARRL wants to participate in the ATS-3 emergency net held weekly, and to use the satellite during incidents.

NASA's ATS Experiments Manager approved ARRL's request, with certain conditions attached.

"As a member of the network, you are responsible for procurement and maintenance of your own equipment," NASA told the League. "The network meets every Wednesday at 1900 GMT on FM Channel 2. The use of SSB or ACSB on ATS-3 is possible, but is not currently a standard practice on the weekly check-in. ACSB channel assignments have been made and use of this mode is encouraged. ...Use of the satellite for mock emergencies or equipment checks outside of the assigned time must be coordinated with the ATS Operations Control Center.

"It is important to avoid the use of Amateur Radio call signs for normal station identification. Instead, an identification such as ARRL-Newington and ARRL-(field location) in addition to your assigned license call, non-Amateur, is required. This is an attempt to avoid any semblance of Amateur Radio-type traffic on the satellite which could possibly give an impression of a 'repeater in the sky' that is available to anyone having the equipment to access ATS-3.

"Amateur call signs may, however, be mentioned over the satellite when used for the purpose of coordinating ARRL operators, equipment and frequencies during an emergency. Of course, no casual conversations unrelated to the purpose of this experiment ("rag-chewing") are permitted on the satellite at any time. Your cooperation in these sensitive areas will be appreciated."

APPLE PETITIONS FOR WIRELESS LAN

Apple Computer, Inc. has filed RM-7618, a *Petition for Rulemaking* to **Create a new Data Personal Communications Service (Data-PCS).** The service would operate within the 1850-1890 MHz (1.85-1.89 GHz) band now used by some point-to-point microwave operations. Amateur spectrum would not be used by Data-PCS. It would be completely non-licensed, 1 W maximum power, and is especially aimed at laptop computer communications.

"If Apple's petition is approved, personal computer users in the future will be able to communicate with other users and with computer peripherals within a building or a campus over radio waves," the company said. "This innovation would eliminate the need, in many cases, for local communications to travel on wired networks."

Other wireless local area network products do exist.

National Volunteer Examiner Coordinator

Page #10

February 15, 1991

Most of them are aimed at fixed, not portable, operation in business environments. They operate under Part 15 rules in the 902-928 MHz spectrum that is shared between government operations, Automatic Vehicle Monitoring (AVM), Amateur Radio, and Industrial-Scientific-Medical (ISM) devices that use RF, such as gluing machines and therapy equipment.

Apple said that this 902-928 MHz band and the other ISM bands at 2.4 and 5.7 GHz aren't good for data personal communications. "After extensive testing, Apple has concluded that such operation in the ISM bands ultimately will be unworkable, because there is a strong likelihood of unpredictable, and essentially uncontrollable, interference in the ISM bands." The company noted that high power stations are permitted in these bands (including ham stations) and thus spectrum in a different band, 1.8 GHz, is needed.

Requirements for Data-PCS

Apple described Data-PCS as a "...user-driven, openaccess high-capacity computer communications technology". The January 29th Wall Street Journal quoted John Sculley, Apple's chief executive officer as saying "We believe it is essential that computer users have access to this vital communications resource in the future." The petition tells the FCC:

"A Data-PCS must be open to any computer manufacturer's products and any network access and usage scheme that complies with regulatory requirements...

"It must not impose licensing obligations or air-time charges upon users of personal computers.

"It must have adequate bandwidth to support highspeed, highly-reliable data communications between and among various types of PCs and peripherals over a 50-meter range, primarily within a single building.

"A Data-PCS radio service must be regulated in a manner that assures that the assigned frequencies will be used by compatible devices for like purposes and that there will be fair access to the frequencies for such devices and purposes.

"Flexibility must be built into the initial regulatory scheme to encourage innovation in and the evolution of Data-PCS technologies and services."

The service would be controlled primarily by FCC equipment certification. Each transmitter would transmit a universal ID with the format selected by industry-

FCC cooperation. Directional antennas would be permitted, and all units would transmit in a packetized format with modulation and encryption to be left to the individual manufacturer.

There would be a minimum required period of listening for traffic before transmitting, and a maximum allowed duration of continuous channel occupancy.

Educational use

"Despite the millions of computers now used in schools around the world," Apple said, "the true power of the computer as an aid to learning has been only partially realized. ...In today's budgetary environment, installing the cabling required for students to use computers collaboratively is prohibitively expensive. Even if funds could be found for hard wiring, it is excessively timeconsuming and constraining to re-arrange a wired network, once installed, as teachers move students among reading, math and writing groups. ...

Data-PCS can make it possible for schools not only to afford to employ networked computers, but also to take advantage of 'situation-driven' learning, that happens spontaneously and results from interaction among students and teachers."

We think that the Apple petition will have a good chance of success if PC users get behind it. Existing microwave users -- which include the oil and gas industry, municipalities and public works projects, in the band of interest -- may balk unless they can be shown that the low-power, indoor Data-PCS would not interfere with their operations.

The FCC is also examining how to use this same band of spectrum for new Personal Communications Services for voice use. Potential providers of voice PCS may not want to accommodate a separate Data-PCS and may lobby the FCC to deny or move the Apple request to other spectrum -- if any can be found!

We believe that hams should consider supporting Data-PCS because if approved, in the band requested, it could reduce the pressure on amateur spectrum from commercial interests who want to introduce new products and technologies. It should provide interesting opportunities for smallscale packet communications in business and personal use. The FCC is taking comments on the petition till March 7, 1991. Be sure to write "RM-7618" on your letter to the Secretary, FCC, Washington DC 20554.